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EXAMINER
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HONEYCUTT, KRISTINA B

ART UNIT	PAPER NUMBER
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2178

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DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/732,029

Applicant(s)

NEWMAN, PAULA S.

Examiner

Kristina B. Honeycutt

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12/08/2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,5-11 and 34-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5-11, 34-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/08/2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>06/13/2002</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is responsive to communications: Application filed 12/08/2000, IDS filed 06/13/2002, Preliminary amendment filed 01/23/2003.
2. Claims 1, 5-11, 34-55 are pending in the case. Claims 1, 34, 48 are independent claims.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 606 in Figure 6. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

4. Claim 7 recites the limitations "the most salient sentences" in line 5 and "the original sentences" in line 7. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 11 recites the limitation "the predecessor" in line 8. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 46 recites the limitation "the plurality of frames" in line 2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 5, 8, 34-36, 39-41, 45, 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Klein (U.S. Patent 6631398).

**Regarding independent claim 1**, Klein discloses a method for providing a display of an electronic mail collection, comprising:

- forming at least one type of electronic mail message abbreviation from the electronic mail collection, the electronic mail collection having at least one electronic mail message (col. 1, lines 33-38; col. 5, lines 53-67; col. 6, lines 1-37 – as demonstrated in the cited text, an electronic mail message “abbreviation” is formed from the “collection”);
- placing the at least one type of electronic mail message abbreviation in a collection viewing cascade (col. 5, lines 58-60; col. 8, lines 25-28 – as demonstrated in the cited text, the electronic mail message “abbreviation” is placed in a “collection viewing cascade”);
- displaying the collection viewing cascade at the selected level (col. 10, lines 46-60 - as demonstrated in the cited text, the “collection viewing cascade” is displayed at the “selected level”);
- receiving a selected level for viewing (col. 10, lines 46-60 - as demonstrated in the cited text, the selected level is received since Klein discloses displaying at “selected” levels and the levels must be received in order to be displayed).

**Regarding dependent claim 5**, Klein discloses the method of claim 1, wherein forming one type of message abbreviation comprises:

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- decomposing each electronic mail message of the collection viewing cascade into a tree structure such that at least one child node represents at least one of a sequence of first-level material from its parent and an excerpt of another message (Figure 2B; col. 5, lines 6-52 – as demonstrated in the figure and cited text, each electronic mail message is “decomposed” into a “tree structure” such that each child represents material from its parent and another excerpt);
- decomposing sequences of first-level material into block types (col. 5, lines 20-52 – as demonstrated in the cited text, “first-level material” is “decomposed” into “block” types);

**Regarding dependent claim 8**, Klein discloses the method of claim 1, wherein the displaying further comprises:

- presenting a thread structure with substantive message fragments of each message embedded within the thread structure (col. 5, lines 53-67; col. 6, lines 1-37 – as demonstrated in the cited text, threads with “embedded fragments” are presented);

**Regarding independent claim 34**, Klein discloses a method comprising:

- creating a message collection viewing cascade for presenting at least one of one or more message threads and one or more messages which are associated with one or more message threads (col. 1, lines 33-38; col. 5, lines 58-60; col. 8, lines

25-28 – as demonstrated in the cited text, a “collection viewing cascade” is created for presenting threads with the associated messages);

- abbreviating at least one of the messages associated with one of the message threads using one a plurality of abbreviation techniques (col. 5, lines 53-67; col. 6, lines 1-37 – as demonstrated in the cited text, a message is “abbreviated” using an “abbreviation technique”);
- formatting each abbreviated message to be displayed at one of a plurality of viewing levels in the message collection viewing cascade (col. 5, lines 58-60; col. 6, lines 25-28 – as demonstrated in the cited text, each “abbreviated” message is “formatted” to be displayed at “viewing levels” since Klein discloses viewing “abbreviated” messages at levels and the messages must be “formatted” in order to be viewed).

**Regarding dependent claim 35**, Klein discloses the method of claim 34 further comprising:

- presenting each abbreviated message in the collection viewing cascade at the one or more viewing levels (col. 10, lines 46-60 – as demonstrated in the cited text, each “abbreviated” message is presented at “viewing levels”).

**Regarding dependent claim 36**, Klein discloses the method of claim 34 further comprising:

- forming a substantive message fragment for a first message in the one or more message threads using one of the abbreviation techniques (col. 5, lines 53-67; col. 6, lines 1-37 – as demonstrated in the cited text, a “substantive message fragment” is formed for the message threads using an “abbreviation technique”);
- formatting each message thread and corresponding substantive message fragment to be displayed in the message collection viewing cascade (col. 10, lines 46-60 – as demonstrated in the cited text, each thread and corresponding message is “formatted” to be displayed in the “collection viewing cascade” since Klein discloses viewing threads in the “collection viewing cascade” and the threads must be “formatted” in order to be viewed).

**Regarding dependent claim 39**, Klein discloses the method of claim 34 further comprising:

- associating subject line information with each message thread (col. 7, lines 11-30; col. 9, lines 35-62 – as demonstrated in the cited text, subject line information is associated with threads).

**Regarding dependent claim 40**, the claim reflects the method for forming a substantive message fragment for one or more of the message threads using an abbreviation technique and formatting the thread to be displayed in the collection viewing cascade as claimed in claim 36 and is rejected along the same rationale.



**Regarding dependent claim 41**, the claim reflects the method for decomposing the message into a tree structure with child node representing first-level material corresponding to parent node and an excerpt of another message as claimed in claim 5 and is rejected along the same rationale.

**Regarding dependent claim 45**, Klein discloses the method of claim 34 further comprising:

- displaying at least a portion of the message threads at the selected viewing level in one of a plurality of frames in a display area (col. 10, lines 46-60 - as demonstrated in the cited text, the message threads are displayed at a “viewing level” in a “frame” in the display area);
- receiving a selection of a viewing level with respect to viewing the message threads in the message collection viewing cascade (col. 10, lines 46-60 - as demonstrated in the cited text, the selected level is received since Klein discloses displaying at “selected” levels and the levels must be received in order to be displayed).

**Regarding dependent claim 47**, Klein discloses the method of claim 34 wherein each message comprises:

- an electronic mail message (col. 1, lines 12-16, 33-38 – as demonstrated in the cited text, the messages are electronic mail messages).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6-7, 9-11, 42-44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (U.S. Patent 6631398) and "AmikaFreedom™ User Guide, September 15, 2000," herein referred to as Amika.

**Regarding dependent claim 6**, Klein discloses determining which of the "block types" are of like type (col. 6, lines 4-37).

Klein further discloses indicating where material has been removed from each of the determined "blocks" of like type by providing indicators (col. 10, lines 54-60).

Klein does not teach abbreviating within the determined blocks of like type by including only a predetermined number of lines. Amika discloses "abbreviating" within the "blocks" by including only a "predetermined number of lines" (p.21, para. 4.4.2; p.26, lines 1-4). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Amika before him at the time the invention was made, to modify "abbreviating" messages taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include only a predetermined number of lines as taught by Amika, because including a predetermined number of lines would allow the user to view only the amount of the

message they had time to view or the amount they could view without scrolling on the display. It would have been advantageous to one of ordinary skill to utilize such combination because the usability of the method would be enhanced since users could specify their own preferences for the amount of lines to be included in the abbreviation.

**Regarding dependent claim 7**, Klein does not teach concatenating at least one sequence of prose paragraphs. Amika discloses concatenating paragraphs since Amika teaches summarizing an email message and an email message can be made up of multiple paragraphs (p.21, para. 4.4.1). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Amika before him at the time the invention was made, to modify "abbreviating" messages taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include concatenating paragraphs as taught by Amika, because concatenating paragraphs would ensure that the entire message is submitted for summarization.

Klein does not teach submitting at least one concatenated sequence to a summarizer that identifies the most salient sentences in the sequence. Amika discloses submitting the concatenated sequence to a summarizer that identifies the "most salient sentences" (p.21, para. 4.4.1; p.25, para. 12-13). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Amika before him at the time the invention was made, to modify "abbreviating" messages taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include submitting the concatenated sequence to a summarizer that identifies the most salient sentences as taught by Amika, because

identifying the most salient sentences would provide an accurate summary of the message which would be essential to users who read only the summary of the message instead of the message in its entirety.

Klein does not teach determining where to insert indicators by aligning the identified sentences with the original sentences. Amika discloses inserting indicators by aligning the identified sentences with the original sentences since Amika teaches inserting indicators and the identified sentences must be aligned with the original sentences in order for the indicators to be inserted where material was removed (p.21, para. 4.4.2). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Amika before him at the time the invention was made, to modify "abbreviating" messages taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include inserting indicators by aligning the identified sentences with the original sentences as taught by Amika, because aligning the identified sentences with the original sentences would ensure that the indicators are inserted in the correct positions for indicating removed material.

**Regarding dependent claim 9,** Klein does not teach presenting a thread structure with a compressed text representation of each message embedded within the thread structure. Amika discloses presenting a "thread structure" with a compressed text representation "embedded within the thread structure" (p.21, para. 4.4.1). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Amika before him at the time the invention was made, to modify "abbreviating" messages

taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include presenting a thread structure with a compressed text representation as taught by Amika, because presenting a compressed text structure would provide a summary of the message for users who do not wish to read the message in its entirety due to preference or lack of time.

**Regarding dependent claim 10**, Klein does not teach presenting a thread structure with an email-adapted summary of each message embedded within the thread structure. Amika discloses presenting a “thread structure” with an email-adapted summary “embedded within the thread structure” (p.21, para. 4.4.1). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Amika before him at the time the invention was made, to modify “abbreviating” messages taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include presenting a thread structure with a email-adapted summary as taught by Amika, because presenting an email-adapted summary would provide a summary of the message for users who do not wish to read the message in its entirety due to preference or lack of time.

**Regarding dependent claim 11**, Klein does not teach displaying a first frame that displays an outline view of a thread in the collection. Amika discloses a “first” frame that displays an outline view of a thread (p.14, para. 6-7, figure under section 4.2). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Amika before him at the time the invention was made, to modify “abbreviating”

messages taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include a first frame that displays an outline view of a thread as taught by Amika, because presenting an outline view of a thread in a frame would allow a user to decide if the message should be read now, at a later time or ever based on the outline of the thread. It would have been advantageous to one of ordinary skill to utilize such combination because the usability of the method would be enhanced since the user could determine if the thread should be read based on the shortened outline of the thread.

Klein does not teach displaying a view of the thread with embedded compressed-text message form in a second frame. Amika discloses displaying the "embedded" compressed-text message form in a "second" frame (p.14, para. 6-7, figure under section 4.2). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Amika before him at the time the invention was made, to modify "abbreviating" messages taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include displaying the "embedded" compressed-text message form in a second frame as taught by Amika, because displaying an compressed-text message in a frame would allow a user to decide if the message should be read in its entirety based on the compressed-text message.

Klein does not teach requesting in the first frame to scroll the display in the second frame to a message selected in the first frame. Amika discloses requesting to scroll the display to the message selected since the figure shows an Outlook window utilizing the method and it was well-known at the time of the invention that selecting a message in one frame would "scroll" to that message in another display frame (p.14,

para. 6-7, figure under section 4.2). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Amika before him at the time the invention was made, to modify "abbreviating" messages taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include requesting to scroll the display to the message selected as taught by Amika, because displaying the message in a separate frame would allow the user to view the other message outlines simultaneously. It would have been advantageous to one of ordinary skill to utilize such combination because the user could determine if there were other messages corresponding to the same topic as the message displayed in the second frame which could then be read next.

Klein does not teach requesting to display the predecessor of the message in the second frame and displaying the predecessor in the first frame. Amika discloses requesting to display the predecessor and displaying the predecessor since the figure shows an Outlook window utilizing the method and it was well-known at the time of the invention that selecting a message in one frame would "scroll" to that message in another display frame and all messages, including the previous messages, were listed in a frame (p.14, para. 6-7, figure under section 4.2). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Amika before him at the time the invention was made, to modify "abbreviating" messages taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include requesting to display the predecessor and displaying the predecessor as taught by Amika, because displaying the predecessor would allow the user to return to messages previously read if the need arose while reading more recent messages.

**Regarding dependent claim 42**, Klein discloses locating an excerpt of another message in each child node for each message (col. 5, lines 39-52; col. 6, lines 15-37).

Klein further discloses replacing each located excerpt with a set of indicators (col. 10, lines 54-60).

Klein does not teach forming a substantive message fragment of the one message by removing all but a set number of lines from the one message, a remaining set number of lines following each set of indicators. Amika discloses forming a "substantive message fragment" by removing all but a "set number of lines" (p.21, para. 4.4.1, 4.4.2; p.26, lines 1-4). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Amika before him at the time the invention was made, to modify "abbreviating" messages taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to remove all but a set number of lines as taught by Amika, because removing all but a set number of lines would allow the user to view only the amount of the message they had time to view or the amount they could view without scrolling on the display. It would have been advantageous to one of ordinary skill to utilize such combination because the usability of the method would be enhanced since users could specify their own preferences for the amount of lines to be included in the abbreviation.

**Regarding dependent claim 43**, Klein discloses shortening an excerpt of another message in each child node for each message (col. 5, lines 6-20, 53-67; col. 6, lines 1-37).



Klein further discloses "decomposing" sequences of "first-level material" in each child node into a plurality of "blocks," each "block" representing one a plurality of text types (col. 5, lines 20-52).

Klein further discloses eliminating at least one of the "blocks" which include extraneous material (col. 6, lines 4-37).

Klein does not teach concatenating at least one shortened excerpt with at least one remaining block for each message while preserving an original order of the shortened excerpts and the remaining blocks within each message to form a compressed text form of the message. Amika discloses concatenating to form a compressed text form of the message in the original order (p.21, para. 4.4.1, 4.4.2). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Amika before him at the time the invention was made, to modify "abbreviating" messages taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include concatenating to form a compressed text message as taught by Amika, because inserting indicators, as taught by Amika (p.21, para. 4.4.2), ensures the original order is preserved since the original order would have to be kept for the indicators to be inserted into the proper positions and forming a compressed text message would provide a summary of the message for users who do not wish to read the message in its entirety due to preference or lack of time.

**Regarding dependent claim 44**, Klein discloses shortening an excerpt of another message in each child node for each message (col. 5, lines 6-20, 53-67; col. 6, lines 1-37).

Klein further discloses “decomposing” sequences of “first-level material” in each child node into a plurality of “blocks,” each “block” representing one a plurality of text types (col. 5, lines 20-52).

Klein further discloses eliminating at least one of the “blocks” which include extraneous material (col. 6, lines 4-37).

Klein does not teach differentially summarizing at least one remaining block based upon the text type represented by each block. Amika discloses summarizing a “block” based on text type (p.21, para. 4.4.1, 4.4.2). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Amika before him at the time the invention was made, to modify “abbreviating” messages taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include summarizing a block based on text type as taught by Amika, because summarizing based on text type would allow summarization of specific text types while leaving other types in original format which would enhance usability since the user would determine which types would be summarized.

Klein does not teach concatenating at least one shortened excerpt with at least one summarized block for each message while preserving an original order of the shortened excerpts and the summarized blocks within each message to form an email-adapted summary of the message. Amika discloses concatenating to form an email-adapted summary of the message in the original order (p.21, para. 4.4.1, 4.4.2). It

would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Amika before him at the time the invention was made, to modify "abbreviating" messages taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include concatenating to form an email-adapted summary as taught by Amika, because inserting indicators, as taught by Amika (p.21, para. 4.4.2), ensures the original order is preserved since the original order would have to be kept for the indicators to be inserted into the proper positions and forming an email-adapted summary would provide a summary of the message for users who do not wish to read the message in its entirety due to preference or lack of time.

**Regarding dependent claim 46**, the claim reflects the method for displaying an outline in a first frame and a compressed-text message in a second frame and requesting to scroll to a selected message and to display a predecessor as claimed in claim 11 and is rejected along the same rationale.

9. Claims 37-38 and 48-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (U.S. Patent 6631398) and Yong et al. (U.S. Patent 5749079).

**Regarding dependent claim 37**, Klein discloses "formatting" the "sorted" message threads to be displayed at the one or more "viewing levels" since Klein discloses viewing messages at levels and the messages must be "formatted" in order to be viewed (col. 10, lines 46-60).

Klein does not teach sorting a plurality of message threads based upon a number of messages in each message thread. Yong discloses sorting a plurality of threads based on the number of messages in each thread (col. 10, lines 24-29). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Yong before him at the time the invention was made, to modify messages threads taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include sorting a plurality of threads based on the number of messages in each thread as taught by Yong, because sorting based on the number of messages would allow users to read threads with the least or most number of messages first, depending on their preference which would enhance usability of the method since users would determine sorting based on their preferences.

**Regarding dependent claims 38 and 50,** Klein does not teach sorting the message threads in order of largest to smallest with respect to the number of messages in each message thread. Yong discloses sorting the message threads in order of largest to smallest with respect to the number of messages in each message thread (col. 10, lines 24-29). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Yong before him at the time the invention was made, to modify messages threads taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include sorting the message threads in order of largest to smallest as taught by Yong, because sorting threads in order of largest to smallest would allow users to read threads with the most number of messages first in order to read those threads that contain the most information and most responses.

**Regarding independent claim 48**, Klein discloses creating a plurality of message threads (col. 1, lines 33-38).

Klein further discloses “formatting” the “sorted” message threads to be displayed at the one or more of a plurality of “viewing levels” in a “collection viewing cascade” since Klein discloses viewing messages at levels and the messages must be “formatted” in order to be viewed (col. 10, lines 46-60).

Klein does not teach sorting the message threads based upon a number of messages in each message thread. Yong discloses sorting a plurality of threads based on the number of messages in each thread (col. 10, lines 24-29). It would have been obvious to one of ordinary skill in the art, having the teachings of Klein and Yong before him at the time the invention was made, to modify messages threads taught by Klein (col. 5, lines 53-67; col. 6, lines 1-37) to include sorting a plurality of threads based on the number of messages in each thread as taught by Yong, because sorting based on the number of messages would allow users to read threads with the least or most number of messages first, depending on their preference which would enhance usability of the method since users would determine sorting based on their preferences.

**Regarding dependent claim 49**, Klein discloses associating subject line information with at least one of the message threads (col. 7, lines 11-30; col. 9, lines 35-62).

**Regarding dependent claim 51**, Klein discloses presenting the “sorted” messages in the “collection viewing cascade” at the one or more “selected viewing levels” since Klein discloses viewing messages at levels and the messages must be “formatted” in order to be viewed (col. 10, lines 46-60).

**Regarding dependent claim 52**, Klein discloses “abbreviating” at least one of the messages associated with one of the message threads using one a plurality of “abbreviation techniques” (col. 5, lines 53-67; col. 6, lines 1-37).

Klein further discloses formatting the “abbreviated” messages to be displayed at one or more of the plurality of “viewing levels” in the “message collection viewing cascade” (col. 5, lines 58-60; col. 6, lines 25-28).

**Regarding dependent claim 53**, Klein discloses forming a “substantive message fragment” for a first message in at least one of the message threads using one of the “abbreviation techniques” (col. 5, lines 53-67; col. 6, lines 1-37).

Klein further discloses “formatting” each message thread and corresponding substantive message fragment to be displayed in the “message collection viewing cascade” (col. 10, lines 46-60).

**Regarding dependent claim 54**, Klein discloses displaying at least a portion of the message threads at the “selected viewing level” in one of a plurality of frames in a display area (col. 10, lines 46-60).

Klein further discloses receiving a selection of one of the "viewing levels" with respect to viewing the message threads in the "message collection viewing cascade" (col. 10, lines 46-60).

**Regarding dependent claim 55**, Klein discloses each message comprises an electronic mail message (col. 1, lines 12-16, 33-38).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


- Method and apparatus for summarizing previous threads in a communication-center chat session. (U.S. Patent 6346952)
- Method and system for conducting a discussion relating to an item (U.S. Patent 6525747)
- Filtered in-box for voice mail, e-mail, pages, web-based information, and faxes (U.S. Patent 6628194)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristina B. Honeycutt whose telephone number is 571-272-4123. The examiner can normally be reached on 8-5:00 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 703-308-5465. The fax phone number for the organization where this application or proceeding is assigned is 571-272-4124.

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KBH

  
**STEPHEN S. HONG**  
**PRIMARY EXAMINER**